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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,739	11/26/2001	Akira Nishimoto	10612/4	5667
7590 12/01/2003				
KENYON & KENYON 1500 K Street, N.W., Suite 700 Washington, DC 20005		EXAMINER BOYD, JENNIFER A		
		ART UNIT PAPER NUMBER 1771		

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary	Application No.		Applicant(s)	
	09/991,739		NISHIMOTO ET AL.	
	Examiner		Art Unit	
	Jennifer A Boyd		1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Response to Amendment

1. The Applicant's Amendments and Accompanying Remarks, filed September 23, 2003, have been entered and have been carefully considered. Claim 1 is amended and claims 1 – 4 are pending. In view of Applicant's amendments, the Examiner withdraws the 35 U.S.C. 112, 2nd paragraph rejection of claims 1 – 4 as detailed in paragraphs 1 – 3 of the previous Office Action dated June 23, 2003. In light of Applicant's Arguments, the Examiner withdraws the rejection of claims 1 and 4 under 35 U.S.C. 103(a) as being unpatentable over Hermann (US 5,763,335) as detailed in paragraph 5 of the previous Office Action dated June 23, 2003. In light of Applicant's Arguments, the Examiner withdraws the rejection of claims 2 and 3 35 U.S.C. 103(a) as being unpatentable over Hermann (US 5,763,335) in view of Nishida (US 6,080,797) as detailed in paragraph 6 of the previous Office Action dated June 23, 2003. However, after an updated search, additional art was found which renders the invention as currently claimed unpatentable for reasons herein below.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 4 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kaibe et al. (US 6,046,119).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Kaibe et al. is directed to a heat-retaining, moisture permeable, waterproof fabric (Title).

As to claim 1, Kaibe teaches a composite fabric comprising an unprocessed fabric with highly moisture-absorbing and releasing, hygroscopically heat-generating organic fine particles immobilized on the unprocessed fabric surface with a moisture-permeable waterproof resin (Abstract and column 4, lines 10 – 15). Kaibe teaches that the moisture-permeable resin can comprise a polyurethane resin and be in the form of a film (column 3, lines 34 – 50). It should be noted that Kaibe teaches a level of moisture-permeability for the resin (column 3, lines 34 – 40), therefore, the resin can be considered “moisture-permeable”. The Examiner equates the unprocessed fabric to Applicant’s “base fabric” and the moisture-permeable resin to Applicant’s “moisture-permeable resin layer”. Kaibe teaches in Table 10 that the resin can be applied in a dry

mass of between 6.9 and 8.4 as embodied in the examples shown (column 15, lines 40 – 60).

Kaibe notes that an additional resin layer can be formed on the “moisture-permeable resin layer” as an overcoating (column 3, lines 50 – 59) and Kaibe teaches that acceptable resins for the overcoating include polyurethane. Kaibe teaches that the additional resin layer also has a certain level of moisture-permeability (column 3, lines 50 – 57), therefore, the resin can be considered to be hydrophilic.

As to claims 2 and 3, it should be noted that the method of forming the acrylonitrile cross-linked polymer is not germane to the issue of patentability of the moisture-permeable waterproof fabric itself. Therefore, the limitation of “produced by introducing a crosslinking structure into an acrylonitrile polymer through hydrazine compound treatment” of claim 2 and the limitation of “produced by introducing a crosslinking structure by using, as a monomer, a compound having two or more polymerizable vinyl groups” have not been given patentable weight. Kaibe teaches that the highly moisture-absorbing and releasing, hygroscopically heat-generating organic fine particles are acrylic metal-modified particles containing a metal salt of a carboxyl group and having a crosslinked structure introduced by hydrazine treatment of an acrylic resin composed of at least 60% by weight, of acrylonitrile as a monomer, a nitrogen content increased by 1.0 to 15.0% by weight, at least 1.0 mmol/g, of remaining nitrile group being chemically converted to a metal salt of carboxyl group by hydrolysis (column 4, lines 60 – 67 and column 5, lines 1 – 5).

As to claims 1 and 4, although Kaibe does not explicitly teach the claimed urethane resin with a coefficient of moisture absorption is 40% or more at 30C and 90% of relative humidity as required by claim 1 and the composite fabric has 3% RH or more of a humidity difference

between the surface protective resin side of the fabric and the moisture-permeable resin layer side of the fabric as required by claim 4, it is reasonable to presume that urethane resin with a coefficient of moisture absorption is 40% or more at 30C and 90% of relative humidity as required by claim 1 and the composite fabric has 3% RH or more of a humidity difference between the surface protective resin side of the fabric and the moisture-permeable resin layer side of the fabric as required by claim 4 is inherent to Hermann. Support for said presumption is found in the use of like materials (i.e. a composite comprising a hydrophilic urethane resin containing moisture absorbing/releasing and heat-generating particles, base fabric and a non-porous urethane film) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of urethane resin with a coefficient of moisture absorption is 40% or more at 30C and 90% of relative humidity as required by claim 1 and the composite fabric has 3% RH or more of a humidity difference between the surface protective resin side of the fabric and the moisture-permeable resin layer side of the fabric as required by claim 4 would obviously have been present once the Hermann product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

Response to Arguments

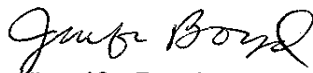
5. Applicant's arguments with respect to claims 1 – 4 have been considered but are moot in view of the new ground(s) of rejection.

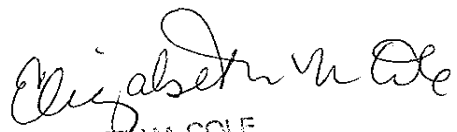
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 703-305-7082. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jennifer Boyd
November 20, 2003


ELIZABETH M. COLE
PRIMARY EXAMINER